

STATE OF WASHINGTON DEPARTMENT OF FCOLOGY

PO Box 47600 • Olympia, WA 98504-7600 • 360-407-6000 TTY 711 or 800-833-6388 (for the speech or hearing impaired)

May 26, 2005

To: Aquatic Nuisance Weed and Algae Permittees:

RE: Permit Modification for Permit No. WAG-993000, Aquatic Nuisance Plant and Algae Control NPDES General Permit regarding the conditions for use of calcium hydroxide and carbon dioxide for nutrient reduction.

The permit referenced above has been modified to include the use of calcium hydroxide and carbon dioxide for nutrient reduction in lakes. When used in combination, calcium hydroxide and carbon dioxide form calcium carbonate. A floc of calcium carbonate acts much like aluminum sulfate in a lake, removing soluble reactive phosphorous from the water column. These two products in combination are authorized for use in aquatic systems in Washington State, subject to the following conditions:

- 1. Prior to partial or whole lake treatments, a jar test shall be conducted using lake water to determine proper application rates for both calcium hydroxide and carbon dioxide.
- 2. In the event that a whole lake application is performed, an Integrated Phosphorous Management Plan (IPMP) shall be prepared and submitted to the Department of Ecology (Ecology) for review prior to application.
- 3. If any fish are killed or distressed during application, the Permittee shall immediately cease treatment and immediately notify the appropriate Ecology Regional Office and the Washington Department of Fish and Wildlife.
- 4. The Permittee shall monitor pH at least three times during and following the application process: once prior to treatment, one hour post treatment, and once twelve to twenty-four hours post treatment. This data should be submitted to Ecology within 30 days of treatment.
- 5. The pH during application shall remain between 6.0 and 9.0. If the pH exceeds the 6.0 to 9.0 range, the Permittee shall cease treatment immediately.
- 6. If the products are being applied using a metered injection process, pH measurements shall be taken daily during the entire application period. The Permittee shall submit a report of the pH measurements to Ecology no later than 30 days after the last day of treatment.

Please contact Kelly McLain of my staff at (360)407-6938 if you have any questions.

Sincerely,

David C. Peeler

Water Quality Program Manager